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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,103	09/30/2003	Fred H. Ives	10021227-1	4798
7590	05/06/2005		EXAMINER	
NGUYEN, VINCENT Q				
		ART UNIT		PAPER NUMBER
		2858		
DATE MAILED: 05/06/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

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### Office Action Summary

Application No.	Applicant(s)	
10/675,103	IVES ET AL.	
Examiner	Art Unit	
Vincent Q. Nguyen	2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1)  Responsive to communication(s) filed on \_\_\_\_.

2a)  This action is FINAL. 2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4)  Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_ is/are allowed.

6)  Claim(s) 1-27 is/are rejected.

7)  Claim(s) \_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.

5)  Notice of Informal Patent Application (PTO-152)

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 9-24, 26, 27, are rejected under 35 U.S.C. 102(b) as being anticipated by Venditti (5,248,933).

Regarding claims 1, 12, 19, Venditti discloses a portable calibration unit for calibrating test equipment comprising (Figure 2) a communication interface for connecting to a computer (16) embedded within said test equipment (20), a variable signal source for producing a test signal (Column 2, lines 51-52 and column 4, lines 11-14) (See also figure 6); a processor (206) (Figure 10) in communication with said computer for controlling said variable signal source; and a test interface (24, 46) for communicating said test signal to said test equipment (20).

Regarding claims 2, 13, 21, Venditti discloses a digital to analog converter (DAC) in communication with said processor (It is inherent that in order for communication between the digital processor, column 1, line 44, and the circuits (Figures 4-5), the system of Venditti must have the ADC), said DAC converting control signals received from said computer for controlling said variable signal source (Column 2, lines 51-52 and column 4, lines 11-14) (See also figure 6).

Regarding claims 3, 14, 22, Venditti discloses a filter (Figure 4) in communication with said variable signal source for filtering harmonics of said test signal outside of a desired test range.

Regarding claims 4, 15, Venditti discloses a signal conditioning circuit (Figure 9) for conditioning said test signal communicated from said test interface.

Regarding claims 5, 23, Venditti discloses a power amplifier (VLM 312) (Figure 7); a diode detector (CR1), and a level controlling circuit (Figure 7) for maintaining a consistent level of said test signal.

Regarding claims 6, 7, 16, 17, Venditti discloses an analog to digital converter (ADC) in communication with said signal conditioning circuit and said processor (It is inherent that in order for communication between the digital processor, column 1, line 44, and the circuits (Figures 4-5), the system of Venditti must have the ADC) said ADC for providing information on said test signal to said processor, wherein said processor communicates said information to said computer.

Regarding claims 9, 26, Venditti discloses power for the unit is supplied by at least an external power connector (Figure 4).

Regarding claim 10, Venditti discloses an ovenizer (Any component generates heat including resistance in the circuit) to heat selected elements (Any element, adjacent to the elements generating heat) of said portable calibration unit (Column 5, lines 30-35).

Regarding claims 11, 18, 20, 27, Venditti discloses a memory (208) within said computer for storing a computer program for directing the generation of said control signals (Figure 10).

Regarding claim 24, Venditti discloses means (202) for reading and forwarding value to the computer.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8, 25, are rejected under 35 U.S.C. 103(a) as being unpatentable over Venditti (5,248,933) in view of Cannon et al. (4,816,767).

Regarding claims 8, 25, Venditti does not disclose phase lock loop.

Cannon et al. discloses a system similar to that of Venditti and further discloses a phase locked loop (125) in communication with said variable signal source (109) to decrease a step-size of said test signal for the purpose of improvement the accuracy (Cannon et al.'s column 1, lines 40-50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the phase lock loop as taught by Cannon et al. into the system of Venditti because phase lock loop controls the input signal and thus enhance the accuracy of the system.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patent No. 4,403,297 (Tivy) discloses a system includes an improved termination base for allowing selective access to a predetermined number of the circuit loop terminations, a multiplexer for providing the selective access to one of the circuit loop terminations, and a computer for performing the tasks at the termination base. The system further includes a portable calibrator for interconnection to the circuit loop terminations at the control room instrumentation and at the field equipment locations, which provides a calibration condition to a selected piece of field equipment, wire identification and two-way communication with the multiplexer located at the termination base.

Patent No. 4,569,221 (Snook) discloses a calibrator in which a single portable unit provides a variety of input and output signals both electrical and pneumatic and displays values for the electrical or pneumatic signals on multiple meters.

***Contact Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent Q. Nguyen whose telephone number is (571) 272-2234. The examiner can normally be reached on 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Vincent Q. Nguyen  
Primary Examiner  
Art Unit 2858

V. Nguyen

May 4, 2005